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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SELLERS, DANIEL R

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/885,307	<b>Applicant(s)</b> KOLAWA ET AL.	
	<b>Examiner</b> DANIEL R. SELLERS	<b>Art Unit</b> 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-6,9,11,25-29,32,33,57,59,60,62-64,70,72,73,75-78 and 81-89 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-6,9,11,25-29,32,33,57,59,60,62-64,70,72,73,75-78 and 81-89 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 6/2/08 have been fully considered but they are not persuasive.
2. Regarding **claims 64, 78, and 84**, Ellis' provisional application (60/270,463, which was introduced and provided in an Office Action mailed 4/22/08) provides support for storing the audio content in memory, skipping disliked audio, and recording based on a schedule of events (i.e. start and end times are disclosed in a schedule) (see p. 1, line 25 - p. 2, line 6, p. 3, line 18-21, and p. 4, line 16 - p. 5, line 2). Ellis changes radio stations by using multiple tuners (see the provisional application, p. 4, line 16 - p. 5, line 2), wherein the music is buffered (p. 2, lines 2-6) so that it is implied that the user does not need to actively switch the radio station. The buffer will record and the user will hear audio output from the buffer, and by utilizing random access memory it will not matter if two or more buffers are used because the user will not notice the switching between buffers (i.e. it will be as if there was one buffer). The automatic rewinding will also make switching between buffers unnoticeable.
3. Regarding **claims 2-6, 9, 11, 25-29, 32, 33, 57, 59, 60, 62, 63, 70, 72, 73, 75-77, 81-83, and 85-87**, see the preceding argument with respect to claims 64, 78, and 84. The prior art teaches the features of these claims and the independent claims from which these depend.
4. Regarding **claims 88 and 89**, see the prior art rejections with respect to 35 USC 103 in the following.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 2-6, 9, 11, 25-29, 32, 33, 59, 60, 62-64, 72, 73, 75-78, and 81-86** are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Ellis et al., US 7,171,174 B2 (hereinafter Ellis).

7. Regarding **claim 64**, Ellis teaches a method, in a communication network including a user station, wherein the method for creating a customized audio program comprising:

*receiving user audio preference information (column 3, lines 30-33 and lines 45-47);  
receiving first audio characteristic information for a first audio piece (column 21, line 5 - column 22, line 11 and figure 14);  
receiving second audio characteristic information for a second audio piece (column 9, lines 27-49, column 21, line 5 - column 22, line 11 and figure 14);  
selecting the first and second audio pieces based on a comparison of respectively the first and second audio characteristic information with the user audio preference information (figure 15);  
identifying first and second audio channels configured to respectively deliver the first and second audio pieces (column 19, line 42 - column 20, line 8 and figure 13, step 1350 and 1354);  
identifying first and second delivery start times in which the first and second audio channels are configured to deliver the first and second audio pieces (column 18, lines 41-47, column 19, line 62 - column 20, line 8, and figure 13, step 1354);  
automatically tuning to the first audio channel for receiving the selected first audio piece based on the identified first audio channel and the identified first delivery start time (column 18, lines 41-47, column 19, line 62 - column 20, line 8, column 20, line 64 - column 21, line 4 and figure 13, step 1370);*

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*automatically tuning, without user intervention since the tuning to the first audio channel, to the second audio channel for receiving the selected second audio pieces based on the identified second audio channel and the identified second delivery start time (column 18, lines 41-47, column 19, line 62 - column 20, line 8, and figure 13, step 1370 and 1374);*

*temporarily storing in a buffer as the customized audio program the received first and second audio pieces (column 9, lines 29-32); and*

*outputting the temporarily stored first and second audio pieces responsive to a detected playback condition, which invokes playback of the customized audio program without switching from the first audio channel to the second audio channel during the playback (figure 13, step 1362).*

Ellis teaches copying audio content into memory (column 12, lines 26-34 and column 17, lines 5-11). Ellis also teaches automatically skipping disliked, or non-preferred, audio content (column 21, line 64 - column 22, line 10). Ellis' provisional application (60/270,463, which was introduced and provided in an Office Action mailed 4/22/08) provides support for storing the audio content in memory, skipping disliked audio, and recording based on a schedule of events (i.e. start and end times are disclosed in a schedule) (see p. 1, line 25 - p. 2, line 6, p. 3, line 18-21, and p. 4, line 16 - p. 5, line 2). The audio program taught by Ellis is output from a random access memory, which is temporary storage, and provides playback without switching from the first channel to the second channel during playback (i.e. the buffered output is switched when the desired content ends on the first channel, and may have to rewind to other buffered content on a second channel).

8. Regarding **claim 2**, the further limitation of claim 64, see the preceding argument with respect to claim 64. Ellis teaches first and second audio characteristic information indicating subject matter content (figure 16).

9. Regarding **claim 3**, the further limitation of claim 64, see the preceding argument with respect to claim 64. Ellis teaches first and second audio pieces including music.

10. Regarding **claim 4**, the further limitation of claim 64, see the preceding argument with respect to claim 64. Ellis teaches first and second audio pieces including voice.

11. Regarding **claim 5**, the further limitation of claim 64, see the preceding argument with respect to claim 64. Ellis teaches first and second audio pieces including an advertisement.

12. Regarding **claim 6**, the further limitation of claim 64, see the preceding argument with respect to claim 64. Ellis teaches the reception of a user selection of a particular theme, or genre, and identifies a user preference with said particular theme.

13. Regarding **claim 9**, the further limitation of claim 64, see the preceding argument with respect to claim 64. Ellis teaches a network that can take many different forms, wherein the network can be a radio broadcast network (column 10, lines 19-21).

14. Regarding **claim 11**, the further limitation of claim 64, see the preceding argument with respect to claim 64. Ellis teaches a computer network to receive the first and second audio pieces and the first and second audio characteristic information (column 10, lines 23-25).

15. Regarding **claim 25**, the further limitation of claim 24, see the preceding argument with respect to claims 2 and 24. Ellis teaches these features.

16. Regarding **claim 26**, the further limitation of claim 84, see the preceding argument with respect to claims 3 and 64. Ellis teaches these features.

17. Regarding **claim 27**, the further limitation of claim 84, see the preceding argument with respect to claims 4 and 64. Ellis teaches these features.

18. Regarding **claim 28**, the further limitation of claim 84, see the preceding argument with respect to claims 5 and 64. Ellis teaches these features.

19. Regarding **claim 29**, the further limitation of claim 84, see the preceding argument with respect to claims 6 and 64. Ellis teaches these features.

20. Regarding **claim 32**, the further limitation of claim 24, see the preceding argument with respect to claims 9 and 24. Ellis teaches these features.

21. Regarding **claim 33**, the further limitation of claim 24, see the preceding argument with respect to claims 11 and 24. Ellis teaches these features.

22. Regarding **claim 59**, the further limitation of claim 64, see the preceding argument with respect to claim 64. Ellis teaches the reception of first and second audio characteristic information in advance of the first and second of audio pieces (figure 15, step 1516).

23. Regarding **claim 60**, the further limitation of claim 64, see the preceding argument with respect to claim 64. Ellis also teaches the reception of first and second audio characteristic information concurrently with the first and second audio pieces (column 20, lines 31-45).

24. Regarding **claim 62**, the further limitation of claim 64, see the preceding argument with respect to claim 64. Ellis teaches customized playback times, wherein the time is selected by the user's selection (column 9, lines 54-58 and column 17, line 54 - column 18, line 19).

25. Regarding **claim 63**, the further limitation of claim 64, see the preceding argument with respect to claim 64. Ellis teaches first and second audio pieces

broadcast over first and second channels based on their broadcast times (figure 13, steps 1354 and column 9, lines 29-32).

26. Regarding **claim 72**, the further limitation of claim 78, see the preceding argument with respect to claim 59. Ellis teaches these features.

27. Regarding **claim 73**, the further limitation of claim 78, see the preceding argument with respect to claim 60. Ellis teaches these features.

28. Regarding **claim 75**, the further limitation of claim 78, see the preceding argument with respect to claim 62. Ellis teaches these features.

29. Regarding **claim 76**, the further limitation of claim 78, see the preceding argument with respect to claim 63. Ellis teaches these features.

30. Regarding **claim 77**, the further limitation of claim 78, see the preceding argument with respect to claim 64. Ellis teaches these features.

31. Regarding **claim 78**, see the preceding argument with respect to claim 64. Ellis teaches a user station comprising these features.

32. Regarding **claim 81**, the further limitation of claim 78, see the preceding argument with respect to claim 2. Ellis teaches these features.

33. Regarding **claim 82**, the further limitation of claim 78, see the preceding argument with respect to claim 9. Ellis teaches these features.

34. Regarding **claim 83**, the further limitation of claim 78, see the preceding argument with respect to claim 11. Ellis teaches these features.

35. Regarding **claim 84**, see the preceding argument with respect to claim 64. Ellis teaches a user station comprising these features.



36. Regarding **claim 85**, the further limitation of claim 64, see the preceding argument with respect to claim 64. Ellis teaches automatic tuning to a second channel during playback of a portion of the customized audio program (figure 13, steps 1330, 1340, 1350, and 1370).

37. Regarding **claim 86**, the further limitation of claim 85, see the preceding argument with respect to claim 85. Ellis teaches automatic tuning, which does not interrupt the playback of the customized audio program (i.e. Ellis teaches buffering).

### ***Claim Rejections - 35 USC § 103***

38. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

39. **Claims 57 and 70** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis as applied to claim 64 above, and further in view of Blum (previously cited).

40. Regarding **claim 57**, the further limitation of claim 64, see the preceding argument with respect to claim 64. Ellis teaches the transmitting of a selected audio piece, which is compared to automatically compile audio characteristic data. However Ellis does not appear to teach an audio vector with these features.

Blum teaches a method of classifying audio (abstract), and Blum teaches the use of computing a distance between a user preference vector and an audio characteristic vector (see Blum, Col. 3, lines 22-29). It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Ellis and Blum for

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the purpose delivering preferred audio pieces to the user in a more targeted manner (Col. 3, lines 35-56).

41. Regarding **claim 70**, the further limitation of claim 78, see the preceding argument with respect to claim 57. The combination teaches these features.

42. **Claim 87** is rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis as applied to claim 64 above, and further in view of Yoshinobu, US 5,734,444 A and Sun, US 6,725,102 B2.

43. Regarding **claim 87**, the further limitation of claim 64, see the preceding argument with respect to claim 64. Ellis teaches buffering and recording presumably only when the device is powered on for listening. Ellis does not appear to teach a playback condition of powering-on the user station.

Yoshinobu teaches recording, or buffering, in a powered off state (column 3, lines 3-9). Yoshinobu teaches recording broadcast television programs, however this is analogous to the broadcast radio music programs taught by Ellis. It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Ellis and Yoshinobu for the purpose of recording programs when the user is not actively listening to the device. However, the combination does not teach that the playback condition is the powering-on of the user station.

Sun teaches an automatic response system to simplify a user's input, wherein past actions are recorded and analyzed (column 3, lines 22-30). Sun also teaches the powering-on playback condition for radio users, wherein the analysis of past actions

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would tune to a preferred radio channel (column 4, lines 61-67). It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Ellis, Yoshinobu, and Sun for the purpose of providing a preferred pre-recorded, or pre-buffered, audio program to the user of the device.

44. **Claim 88** is rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis in view of Routtenberg et al. (hereinafter Routtenberg), US 2002/0049717 A1.

45. Regarding **claim 88**, see the preceding argument with respect to claim 64. Ellis teaches a method for creating a customized audio program comprising:

*receiving a user's musical preference information (column 3, lines 30-33 and lines 45-47);  
receiving a plurality of musical pieces transmitted via an audio channel, each of the plurality of musical pieces including music identification information (column 9, lines 27-44, column 10, lines 29-39, and column 21, lines 37-39);*

*retrieving musical characteristic information for the plurality of musical pieces (column 21, lines 5-59);*

*selectively downloading one or more of the plurality of musical pieces based on a comparison of the user's musical preference information with the musical characteristic information of each of the plurality of musical pieces, wherein the selectively downloading downloads an entirety of a first one of the plurality of musical pieces that is determined to satisfy the user's musical preference (column 9, lines 27-44), but not an entirety of a second one of the plurality of musical pieces that is determined to not satisfy the user's musical preference; and*

*generating a playlist based in the selectively downloaded musical pieces (column 21, line 60 - column 22, line 11).*

Ellis teaches a method of creating a customized audio program, wherein desired content is played back from a buffer in memory while the radio scans to record more data (see citations above). Ellis teaches user preferences, wherein a user can indicate that they do not like a certain musical performance (column 19, lines 52-55). However, Ellis beyond skipping audio content, which has been buffered, does not appear to teach

the step of not downloading an entirety of a musical piece that is determined to not satisfy the user's preferences.

Routtenberg teaches a method of distributing audio content files in a vehicle (abstract and ¶ 0026). Specifically, Routtenberg contemplates user's preferences and delivers preferred content and does not store disliked content (¶ 0079). It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Ellis and Routtenberg for the purpose of saving memory, wherein disliked content can be deleted. It would have been obvious to delete the content either before or after it had been buffered for some time, wherein a broadcast identifier would need to be received first and compared to the user's preferences before deciding to delete the musical piece.

46. **Claim 89** is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Ellis and Routtenberg as applied to claim 88 above, further in view of Weare et al. (hereinafter Weare), US 6,657,117 B2.

47. Regarding **claim 89**, see the preceding argument with respect to claim 88. The combination of Ellis and Routtenberg teaches a method for creating a customized audio program with the similar features of claim 88. The combination does not appear to teach an audio vector storing musical characteristics including tempo for determining user's preference.

Weare teaches a classification system, wherein user preferences are used to generate a playlist (figure 2 and column 8, lines 17-43). Specifically, Weare teaches

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using a tempo measure in a classification audio vector for the purpose of retrieving the audio based on a comparison of the audio vector with user preferences (column 25, line 66 - column 26, line 22). It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Ellis, Routtenberg, and Weare for the purpose of matching user preferences with more refined skill.

### ***Conclusion***

48. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ellis et al., US 5,612,729 A - teaches a characterization signal of an audio broadcast signal and incorporated by reference in primary reference in 35 USC 102(e) rejections;

Marks et al., US 2001/0053944 A1 - teaches personal playlists (§ 0003);

Ricard et al., US 6,961,550 B2 - teaches changing a radio channel based on detection of certain signals (abstract); and

Ten Kate et al., US 6,601,237 B1 - teaches buffering and outputting preferred content without switching channels (column 6, lines 8-32, lines 47-62, and figure 4).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL R. SELLERS whose telephone number is (571)272-7528. The examiner can normally be reached on Monday to Friday, 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Suhan Ni can be reached on (571)272-7505. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel R. Sellers/  
Examiner, Art Unit 2615

/Suhan Ni/  
Primary Examiner, Art Unit 2614